

IN THE CLAIMS:

1-4. (Cancelled)

5. (Previously Presented) An apparatus for fabricating a holey optical fiber, comprising:
a preform cover sealing one end of a holey optical fiber preform having a plurality of air holes disposed in a substantially vertical orientation;
a gas supplier for supplying gas into the air holes via the preform cover to prevent the air holes from being distorted
a pressure regulator for controlling the amount of gas supplied from the gas supplier to be constant; and,
a heating means installed at the other end of the holey optical fiber preform for heating the other end of the preform to draw an optical fiber.

6. (Original) The apparatus of claim 5, further comprising a fixing rod attached to the top of the preform cover to hold the holey optical fiber preform in a stationary position.

7. (Original) The apparatus of claim 5, wherein the gas is nitrogen.

8. (Previously Presented) An apparatus for fabricating a holey optical fiber, comprising:

- a tubular preform having a plurality of air holes disposed in a substantially vertical orientation;
- a sealing means operative to cover the top portion of the tubular preform for receiving a flow of gas at a predetermined pressure;
- a storage means for supplying the gas to the air holes via the preform sealing means to prevent the air holes from being distorted;
- a regulating means for controlling the amount of gas supplied from the storage means to the sealing means to be constant; and,
- a heating means coupled at the other end of the tubular preform for heating the tubular preform while drawing an optical fiber from the tubular preform.

9. (Cancelled).

10. (Original) The apparatus of claim 8, wherein the gas is nitrogen.